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**Notes:**

1. Untranslatable words are replaced with asterisks (\*\*\*).
2. Texts in the figures are not translated and shown as it is.

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### [Claim(s)]

[Claim 1]Brain metabolism promotion and a cerebral function improvement treating agent which makes an ASUPA rasas Linnea Rith extract an active principle.

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### [Detailed Description of the Invention]

[0001]

[Industrial Application]This invention relates to the brain metabolism promotion and the cerebral function improvement treating agent which make an active principle the component of ASUPA rasas Linnea Rith belonging to the pulse family.

[0002]

[Description of the Prior Art]Before, ABAN (Takeda Chemical), L-DOPA, etc. are known as the brain metabolism promotion and a cerebral function improvement treating agent in connection with cerebral functions, such as senile dementia and Parkinson's disease.

[0003]

[Problem to be solved by the invention]In the short term, Parkinson's disease improvement treating agents, such as senile dementia improvement agents, such as ABAN, or L-DOPA, have not come [ however, ] to improve brain metabolism fundamentally, although brain metabolism is promoted. moreover -- as the side reaction of ABAN or L-DOPA -- the numbness of hand and foot, and dizziness -- it is unsteady, and it is not excited and is not made nervous system hindrance, such as admiration and a headache, -- mental disorder, such as \*\*, disquiet, and insomnia, -- further -- a loose passage -- he has diarrhea, and it vomits and the hindrance of alimentary systems, such as mind, anorexia, a stomachache, and abdominal discomfort, is known.

[0004]In order the therapy of senile dementia and Parkinson's disease is difficult, and an effect is thin or to require a long time, the thing with sufficient effect was not known.

[0005]There are few side reactions, the metabolic turnover of neurotransmitter, protein metabolism, etc. make an aged person's brain metabolism active, and memorize it, and an object of this invention is to provide the brain metabolism accelerator and cerebral function improvement treating agent which improves a cerebral function.

[0006]Then, in order to solve said purpose, as a result of repeating research wholeheartedly, this

invention persons found out that the ASUPA rasas Linnea Rith extract belonging to the pulse family was effective in brain metabolism promotion and a cerebral function improvement therapy without a side reaction, and completed this invention.

[0007]The active principle of this invention consists of ASUPA rasas Linnea Rith's extract, and, [ as an extraction method ] It can obtain by water and/or an organic solvent extracting ASUPA rasas Linnea Rith's leaf or stem, and grinding the leaf or stem of the method of distilling an extracting solvent out of this extract, or ASUPA rasas Linnea Rith. It may extract like the process of the usual Japanese tea, Chinese tea, tea, etc.

[0008]When extracting with water, 50 to 1000 times as much water as ASUPA rasas Linnea Rith is added, and it is preferred after boil to carry out boil extraction about further 5 to 30 minutes. When extracting like the usual tea, it is neglected about 3 to 30 minutes with the 50 to 500 times as much hot water of 80 to 100 degrees as ASUPA rasas Linnea Rith's dried leaf, and an extract is obtained.

[0009]As an example of an organic solvent, methanol, ethanol, acetone, etc. are mentioned and conventional means, such as extraction, can be used in extraction at the time of \*\*. Separation of an extract can also use conventional means, such as decantation and centrifugal separation.

[0010]Distilling off of an extracting solvent can also use conventional means, such as lyophilization. ASUPA rasas Linnea Rith himself can be ground and powder-ized, and it can also be used.

[0011]The carrier, excipient, binder by which this constituent is physiologically permitted in an active principle and in which it deals, Mix with a diluent, for example, as a granule, dust, hard capsules, an elastic capsule, an ointment, sirup, suppositories, and injections, [ taking orally or a parenteral target ] Or it mixes, and as it is, with arbitrary forms, such as a solution, powder granules, a tablet, an emulsion, and the shape of a jelly, independent administration and a concentrate can be used, or it can mix to other food and drink, and can also eat [ drinking and ].

[0012]As for a dose, although it changes with the kind of target disease, and grades, when it uses regularly as a drink, it is preferred to drink and that 100-1500ml/day eats a 1-5g dried leaf / 1 solution.

[0013]By acute toxicity [ as opposed to a rat in ASUPA rasas Linnea Rith ], there is no example of death and abnormalities were not accepted in the biochemical examination and the histopathological inspection.

[0014]

[Effect]This invention can make active brain metabolism of a mammal including humans, can memorize it, can improve a cerebral function, and can carry out a therapy or an improvement for cranial nerve diseases, such as senile dementia and Parkinson's disease, without a side reaction. Since there is no side reaction, the improvement therapy of the cerebral function can be quickly carried out by administration by eating and drinking etc.

[0015]

[Working example]

Let the leaf (with a stem) of *Aspalathus linearis* which carried out example extraction of manufacture be a dried leaf through the process of rolling, enzyme fermentation, and solar drying after cutting to 5-mm length. Desiccation boiled 1-5g for 5 to 30 minutes with 1.5-2 l. of water, and obtained the extract.

[0016]

[Working example]

Working example 1 [a brain metabolism promotion experiment]

The extract administration group which takes in the extract obtained in the example of manufacture

every day to a rat (SD system, a male) and which was given instead of water, it dividing into the rat (control group) which gave usual water, and the guide cannula for minute dialysis inner tubes being surgically looked like [ the brain of a rat ], being embedded in it, and after an operation and 20-hour or more progress, [ a minute dialysis inner tube ] [ intercalate and ] By dialysis, the neurotransmitter within a brain (neurotransmitter) was taken out, it connected with high performance chromatography (HPLC), and the situation of brain metabolism promotion was detected with the electrochemical detector. The result is shown in Table 1.

[Table 1]

表 1

	D O P A C	H V A	5 - H I A A
コントロール群	1 0 0 %	1 0 0 %	1 0 0 %
抽出液投与群	1 1 0	1 0 6	1 5 2

From Table 1, it became clear by the extract administration group that DOPAMIN metabolite etc. increase and brain metabolism is promoting.

[0017]Working example 2 [a dementia-like improvement experiment]

In the end of dried powder (an equivalent for a 1g; 3g dried leaf) the extract obtained in the example of manufacture was dried with the lyophilizer, it was of a poor appetite, and he has forgotten the walk, five advanced age state [ where he was absent-minded ] dogs were medicated with it, and the improvement of condition was investigated. The result is shown in Table 2.

[Table 2]

表 2

症 例 数	有 効	不 変
5	4	1

The energy of four advanced age dogs is recovered after administration and among five animals, appetite also comes out, and it wanted to go [ come ] for a walk.

[0018]ASUPA rasas Linnea Rith's chemical-analysis result is as follows.

Iron 23.40mg/100g calcium 187.00mg/100g potassium 398.00mg/100g magnesium 207.00mg/100g copper 2.25 ppm Zinc 6.74 ppm Selenium 0.13 ppm. Vitamin E 17.00 mg/100g protein . 8.00% flavonoid 41.00mg/100g Anti-oxidization ability and SOD Mr. potency 69,000 unit/g acid insolubility protein component 150mg/100g aroma component 100mg/100g sugar content compound 690 mg/100 g [0019]As an aroma component, a carbonyl compound (15%), a carotinoide decomposition product (17%), the organic acid (22%) of the carbon numbers 2-12, a phenolic compound (13%), an aromatic oxygenated compound (7%), aromatic hydrocarbon (5.5%), terpenoid (4%), etc. are contained. Acid insolubility protein is a protein component with comparatively big molecular weight.

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[Translation done.]